

Appl. No. 10/694,978
Amdt. dated June 2, 2006
Reply to Office Action of 3/2/2006

REMARKS

Claims 1–34 are cancelled. New claims 35–53 are presented.

Support for new claims 35 and 36 can be found at p. 4, lines 9–21; p. 50, lines 5–11 and 19–21; and in claim 19 as originally filed.

Support for new claim 37 and 38 can be found at p. 4, lines 21–27; p. 50, lines 5–11 and 19–21; and in claim 7 as originally filed.

Support for new claims 39–52 can be found in previously presented claims 22–25, 27, and throughout the specification.

Support for new claim 53 can be found in SEQ ID NO: 2.

Applicant believes that no new matter is added by way of amendment.

I. Rejection under 35 U.S.C. §102(e).

The Examiner rejected Claims 21–23, 25, 27, and 34 under 35 U.S.C. §102(e) as anticipated by Yang Pan (U.S. Pat. No. 6,117,654) (“the ‘654 patent”). As discussed in greater detail below, Applicant believes that the claims as amended are not anticipated by the ‘654 patent.

Applicant has become aware that the peptide sequences presented as SEQ ID NOs: 2 and 4 in the instant specification are splice variants of the sequence disclosed in the ‘654 patent as TANGO-77 (SEQ ID NO: 2 therein). The two sequences are splice variants of the same gene, IL-1F7, as illustrated in Fig. 1 of later-filed U.S. Pat. No. 7,033,783 (the ‘783 patent), and as discussed at columns 14–15 therein. In that figure, a schematic representation of “Tango-77” is presented as well as a schematic representation of “TDZ.1”, which is disclosed but not claimed in the ‘783 patent. Comparison of the sequence of TDZ.1 (SEQ ID NO: 8 of the ‘783 patent) with SEQ ID NO: 4 of the instant application shows that the sequences are identical with the exception of an A42T substitution. Figure 1 of the ‘783 patent (and col. 15, ll.14–17) shows that TDZ.1 differs from Tango-77 in that TDZ.1 contains exon 4.

Comparison of SEQ ID NO: 2 of the instant specification with TANGO-77 of the ‘654 patent (SEQ ID NO: 2 therein), in light of the structural relationship suggested in the ‘783 patent, shows that the two differ by replacement of K49 in TANGO-77 with a 41 amino acid segment, and also by P108L and W164R substitutions.

Appl. No. 10/694,978
Amdt. dated June 2, 2006
Reply to Office Action of 3/2/2006

Similarly, comparison of SEQ ID NO: 4 of the instant specification with TANGO-77 shows that the two differ by replacement of K49 in TANGO-77 with a 41 amino acid segment, and also by G31V and T42A substitutions.

For the Examiner's convenience, a lineup of TANGO-77 and SEQ ID NOs: 2 and 4 of the instant application is provided with this response, including the IL-1H4 (a.k.a. IL-1F7) sequence with Genbank accession no. Q9NZH6, which is cite no. CB in the supplemental IDS dated January 27, 2006.

New claims 35-53 have been presented reciting that the claimed antibodies recognize epitopes that are not present in TANGO-77. These epitopes are supported in the specification, in SEQ ID NOs: 2 and 4, and in the original claims as filed. Because these sequences are not found in TANGO-77, antibodies binding to these epitopes are unlikely to bind to TANGO-77, thus obviating the Examiner's rejection based on the likelihood of cross-reactivity.

In light of the amendments to the claims, Applicant respectfully requests that the rejection under 35 U.S.C. §102(e) be withdrawn.

II. Rejection under 35 U.S.C. §103(a).

The Examiner rejected Claim 24 under 35 U.S.C. §103(a) as unpatentable over the '654 patent in view of the Stratagene catalog (1988, page 39). Claim 24 has been cancelled, but new Claims 47 and 48 recite analogous claim elements.

For the reasons outlined above, Applicant believes that the claims as amended are not anticipated any the '654 patent, and thus that new Claims 47 and 48 are not rendered obvious by the combination of that reference with the Stratagene catalog reference.

In light of the amendments to the claims, Applicant respectfully requests that the rejection under 35 U.S.C. §103(a) be withdrawn.

Appl. No. 10/694,978
Amdt. dated June 2, 2006
Reply to Office Action of 3/2/2006

Conclusion

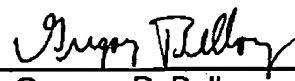
Applicant's current response is believed to be a complete reply to all the outstanding issues of the latest Office action. Further, the present response is a bona fide effort to place the application in condition for allowance or in better form for appeal. Accordingly, Applicant respectfully requests reconsideration and passage of the amended claims to allowance at the earliest possible convenience.

Applicant believes that no additional fees are due with this communication. Should this not be the case, the Commissioner is hereby authorized to debit any charges or refund any overpayments to DNAX Deposit Account No. 04-1239.

If the Examiner believes that a telephonic conference would aid the prosecution of this case in any way, please call the undersigned.

Respectfully submitted,

Date: June 2, 2006

By: 
Gregory R. Bellomy
Registration No.: 48,451
Attorney for Applicant

Customer No. 028008
DNAX Research, Inc.
901 California Avenue
Palo Alto, CA 94304-1104
Tel. (650) 496-6400
Tel. (Direct): (650) 496-6565
Fax: (650) 496-1200

Appl. No. 10/694,978
Amdt. dated June 2, 2006
Reply to Office Action of 3/2/2006

1
Q9NZH6 MSFVGENSGV KMGSEDWEKD EPQCCLEDPA GSPLEPGPSL
Seq ID 2 MSFVGENSGV KMGSEDWEKD EPQCCLEDPA GSPLEPGPSL
Seq ID 4 MSFVGENSGV KMGSEDWEKD EPQCCLEDPA GSPLEPGPSL
Tango-77* MSFVGENSGV KMGSEDWEKD EPQCCLEDPA GSPLEPGPSL
V

41
Q9NZH6 PTMNFVHTSP KVKNLNPKKF SIHDQDHKVL VLDSGNLIIV
Seq ID 2 PTMNFVHTSR KVKSLNPKKF SIHDQDHKVL VLDSGNLIIV
Seq ID 4 PAMNFVHTSP KVKNLNPKKF SIHDQDHKVL VLDSGNLIIV
Tango-77 PTMNFVHTK
A KR S

81
Q9NZH6 PDKNYIRPEI FFALASSLSS ASAEKGSPIL LGVSKGEFCL
Seq ID 2 PDKNYIRPEI FFALASSLSS ASAEKGLIL LGVSKGEFCL
Seq ID 4 PDKNYIRPEI FFALASSLSS ASAEKGSPIL LGVSKGEFCL
Tango-77 I FFALASSLSS ASAEKGSPIL LGVSKGEFCL
L

121
Q9NZH6 YCDKDKGQSH PSLQLKKEKL MKLAAQKESA RRPFIIFYRAQ
Seq ID 2 YCDKDKGQSH PSLQLKKEKL MKLAAQKESA RRPFIIFYRAQ
Seq ID 4 YCDKDKGQSH PSLQLKKEKL MKLAAQKESA RRPFIIFYRAQ
Tango-77 YCDKDKGQSH PSLQLKKEKL MKLAAQKESA RRPFIIFYRAQ

161
Q9NZH6 VGSWNMLESA AHPGWFICTS CNCNEPVGVT DKFENRKHIE
Seq ID 2 VGSRNMLESA AHPGWFICTS CNCNEPVGVT DKFENRKHIE
Seq ID 4 VGSWNMLESA AHPGWFICTS CNCNEPVGVT DKFENRKHIE
Tango-77 VGSWNMLESA AHPGWFICTS CNCNEPVGVT DKFENRKHIE
R

201
Q9NZH6 FSFQPVCKAE MSPSEVSD
Seq ID 2 FSFQPVCKAE MSPSEVSD
Seq ID 4 FSFQPVCKAE MSPSEVSD
Tango-77 FSFQPVCKAE MSPSEVSD

* - Tango-77 is SEQ ID NO.: 2 from Yang Pan., U.S. Pat. No. 6,117,654 (178 aa)